

WHAT IS CLAIMED IS:

1 1. In a therapy for inhibiting incontinence by effecting a desired
2 contraction of a discrete target region within an endopelvic support tissue, a method
3 comprising:

4 engaging a surface of a probe against the discrete target region of the
5 endopelvic support tissue;

6 directing energy from an array of transmission elements disposed on the
7 probe surface into the support tissue so as to effect the desired contraction of the target
8 region, wherein the energy directing step is performed without moving the probe.

1 2. The method of claim 1, wherein the energy directing step comprises
2 transmitting the energy across a probe surface/tissue interface having a length of at least 10
3 mm and a width of at least 5 mm, the energy being sufficient to contract the endopelvic
4 support tissue without ablating the endopelvic support tissue.

1 3. The method of claim 2 wherein the engaging step comprises engaging
2 a curving surface of the probe against an endopelvic fascia, the curving surface being at least
3 semi-rigid.

1 4. The method of claim 3, wherein the engaging step further comprises
2 flexing the curving surface of the probe against the target region so that each element of the
3 array is electrically coupled with the endopelvic fascia, the elements comprising electrodes.

1 5. The method of claim 3, wherein the flexing step comprises pushing
2 manually against a thin flat probe body.

1 6. The method of claim 1, wherein the array comprises a two-
2 dimensional array of electrode pairs, and wherein the directing energy step comprises
3 applying bipolar electrical energy between the electrodes of each pair.

1 7. The method of claim 1, wherein the array comprises a two-

2 dimensional array of electrodes, and wherein the directing energy step comprises applying
3 bipolar electrical energy between pairs of the electrodes, wherein at least one electrode of the
4 array is disposed between at least one of the pairs.

1 8. The method of claim 1, further comprising controlling the energy
2 directing step so that the support tissue is heated to a temperature in a range from about
3 70E C to about 140E C.

1 9. The method of claim 8, wherein the limiting step comprises varying a
2 distribution of electrical power to the electrodes of the array.

1 10. In a therapy for incontinence by effecting a desired contraction of an
2 endopelvic fascia, the endopelvic fascia composed of a left portion and a right portion, a
3 method comprising:

4 accessing a first target region along the left or right portion of the endopelvic
5 fascia, the first target region being offset laterally from the urethra;
6 positioning a probe surface against the first target region;
7 directing energy from the positioned probe surface into the first target region
8 so as to effect the desired contraction of the left or right portion of the endopelvic fascia
9 without moving the positioned probe surface.

1 11. The method of claim 10, wherein the first target region is disposed
2 along the left portion of the endopelvic fascia, and further comprising accessing a second
3 target region along the right portion of the endopelvic fascia, the second region being offset
4 laterally from the urethra so that the urethra is disposed between, and separated from, the
5 first and second target regions; and directing energy from a probe surface into the second
6 region so as to effect the desired contraction of the other portion without moving the probe
7 surface.

1 12. The method of claim 11, wherein the first and second energy directing
2 steps are performed so as to effect sufficient contraction of the endopelvic fascia to inhibit
3 incontinence.

1 13. The method of claim 11, wherein the first and second energy directing
2 steps are performed simultaneously.

1 14. The method of claim 11, wherein the first and second energy directing
2 steps are performed sequentially with a single surface of the probe.

1 15. The method of claim 10, wherein the positioning step comprises
2 aligning a protective zone of the probe surface with the urethra by receiving the urethra in an
3 indentation of the probe surface.

1 16. The method of claim 15, wherein the aligning step comprises
2 introducing a catheter into the urethra to expand the urethra.

1 17. The method of claim 10, wherein the positioning step comprises
2 inserting a probe while the probe is in a narrow configuration, and mechanically expanding
3 the inserted probe to an enlarged configuration to urge the probe surface against the first
4 target region.

1 18. A method for selectively contracting a target tissue, the method
2 comprising:
3 aligning a treatment surface of a probe with a first portion of the target tissue,
4 the treatment surface having a peripheral portion and an interior portion;
5 directing energy from the treatment surface into the first portion of target
6 tissue so as to contract the first portion, wherein contraction of the first portion draws a
7 second portion of the target tissue into alignment with the peripheral portion of the treatment
8 surface;
9 selectively directing energy from the peripheral portion of the treatment
10 surface into the second portion of the target tissue.

1 19.) A device for effecting a desired contraction of a discrete target region
2 of a tissue, the target region having a target region size and shape, the device comprising:

Sub A
3 a probe having a treatment surface, the treatment surface size and shape
4 corresponding to the size and shape of the target region;
5 at least one element disposed along the treatment surface for transmitting
6 energy from the treatment surface to the target region without moving the probe such that the
7 energy effects the desired contraction.

Sub 1
1 20. The device of claim 19, wherein the at least one element comprises a
2 plurality of electrodes distributed across the treatment surface of the probe so as to define an
3 array.

Sub 2
1 21. The device of claim 20, further comprising a power source coupled to
2 the electrodes of the array via circuitry that delivers sufficient electrical power through the
3 electrodes to the target tissue to effect the desired contraction of the target region without
4 charring and without ablating the tissue.

Sub 2
1 22. The device of claim 20, further comprising a thin flat probe body
2 defining the treatment surface, wherein the treatment surface is at least semi-rigid.

Sub 2
1 23. The device of claim 20, wherein the probe body has an expansion
2 member for urging the electrodes against the target tissue.

Sub 1
1 24. The device of claim 19, wherein the at least one element comprises a
2 conduit for a hot fluid.

Sub 1
1 25. The device of claim 19, wherein the treatment surface has a length in a
2 range from about 10 mm to about 50 mm and a width in a range from about 5 mm to about
3 30 mm.

Sub 1
1 26. The device of claim 19, further comprising an energy source coupled
2 to the element so as to deliver the energy to the element with minimal collateral damage to
3 the target tissue.

1 27. The device of claim 26, wherein the at least one element defines a
2 central treatment area and a peripheral treatment area, and wherein the energy source
3 independently energizes the peripheral area to contract tissues brought into contact with the
4 treatment surface from previous tissue contraction.

1 28. A device for effecting contraction of a target fascial tissue, the target
2 tissue having a fascial surface, the device comprising:
3 a probe body having a treatment surface, the treatment surface being oriented
4 for engaging the fascial surface, the probe body being at least semi-rigid and having a length
5 of at least about 10 mm and a width of at least about 5 mm;
6 an array of electrodes distributed over the treatment surface for transmitting
7 energy into the engaged target tissue without moving the probe such that the energy contracts
8 the target tissue.

1 29. The device of claim 28, wherein the probe body comprises a thin flat
2 structure, the treatment surface defining a major surface of the probe body.

1 30. The device of claim 29, wherein the probe body is semi-rigid or rigid.

1 31. A device for contracting a target tissue having a tissue surface, the
2 device comprising:
3 a probe having a treatment surface oriented for engaging the tissue surface of
4 the target tissue;
5 an electrode disposed on the treatment surface of the probe and engageable
6 against the target tissue surface so as to contract the engaged target tissue from an initial size
7 to a contracted size, the electrode comprising a peripheral portion and an interior portion, the
8 interior portion having an area corresponding to the contracted size of the tissue, the
9 peripheral portion being energizeable independently from the interior portion.

1 32. A probe for contracting a target tissue of a patient body, the probe
2 comprising:
3 a probe body having a tissue engaging surface; and

4 an energy transmitting element disposed along the surface of the probe, the
5 energy transmitting element capable of directing sufficient energy into the target tissue to
6 shrink the target tissue, the energy transmitting element having a mechanism that limits
7 transmitted energy so as to avoid ablation of the target tissue.

1 33. The probe of claim 32, wherein the limit mechanism comprises a
2 thermal mass, the energy transmitting element comprising a heat transfer surface thermally
3 coupled to the thermal mass, the thermal mass transferring a significant portion of the energy
4 when the heat transfer surface cools from a safe tissue temperature toward body temperature.

1 34. The probe of claim 32, wherein the limit mechanism comprises a
2 reaction mass that reacts to transfer the energy and which is depleted when the energy is
3 transferred.

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